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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/980,549	04/05/2002	Tommi Koistinen	4925-161PUS	5724

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 Michael C Stuart
 Cohen Pontani Lieberman & Pavane
 551 Fifth Avenue
 Suite 1210
 New York, NY 10176

EXAMINER

WOZNIAK, JAMES S

ART UNIT	PAPER NUMBER
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2626

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/980,549

Applicant(s)

KOISTINEN, TOMMI

Examiner

James S. Wozniak

Art Unit

2626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 17 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 August 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. In response to the office action from 4/17/2006, the applicant has submitted an amendment, filed 7/17/2006, amending claims 1-8, while adding claim 9 and arguing to traverse the art rejection based on the limitation regarding the adaptive control of a modem and/or codec transfer rate based on network congestion (*Amendment, Pages 6-7*). The applicant's arguments have been fully considered, however the previous rejection is maintained due to the reasons listed below in the response to arguments.

Response to Arguments

2. Applicant's arguments have been fully considered but they are not persuasive for the following reasons:

With respect to **claims 1 and 4**, the applicant first argues that Suzuki et al (*U.S. Patent: 5,493,610*) fails to teach a network that is a packet network, specifically for VoIP applications, as is recited in the amended claims (*Amendment, Pages 6-7*). In response, the examiner notes that the presently claimed invention recites a device and method for adjusting a transfer rate of a speech codec and data modem based on “a network” load (*claim 1, line 2 and claim 4, line 3*). The presently claimed invention does not recite a VoIP or packet network and components of those networks to define the presently claimed invention over the teachings of Suzuki in view of

Chang et al (U.S. Patent: 5,367,523). Although, the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The applicant next argues that Chang fails to disclose “a plurality of transmission units, as recited in amended independent claims 1 and 4” (*Amendment, Page 7*). In response the examiner notes that the teachings of Chang are not relied upon to provide a plurality of transceiver units, which comprise a modem and speech codec in the presently claimed invention. The teachings of Chang are relied upon to provide the concept of adjusting a transmission rate according to a network congestion status, wherein non-real time data signals receive a lower transmission rate under a congestion condition than real-time voice signals (*see prior Office Action, Page 3; and Chang, Col. 2, Lines 53-64; Col. 8, Lines 3-24; and Col. 6, Lines 50-60*). Further, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

As pointed out in the prior office action, it is the Suzuki reference that discloses the plurality of transceiver units in the form of a speech encoder/decoder (*Col. 4, Lines 41-62 and Fig. 1, Elements 7 and 13*) and a modem for use with facsimile data (*Col. 4, Lines 41-62 and Fig. 1, Element 5*). Although Suzuki mentions that a transmission rate can be adjusted based upon a network load (*Col. 6, Lines 1-12*), Suzuki does not teach assigning priority-based rate adjustment, wherein speech data receives a higher priority than modem-related data. Chang, as noted in the previous office action (*Page 3*), discloses the concept of providing a higher priority

to speech data during a network congestion condition (*Col. 6, Lines 21-48*). Modifying the teachings of the Suzuki reference with the concept of providing a higher priority to speech data during a network congestion condition as taught by Chang, would allow for the modification of both transmission rates because Chang teaches adjusting both voice and non-voice priority based on a congestion condition and Suzuki discloses a system with multiple transceiver means that already features a means for adjusting transmission rates based on network congestion. Also, modifying the teachings of Suzuki with the teachings of Chang provides the benefit of achieving optimum data transmission performance (*Chang, Col. 6, Lines 50-60*).

Thus, it is the combination of Suzuki and Chang that provides the teachings corresponding to the aforementioned claim limitations.

In response to the applicant's argument that one of ordinary skill in the art would not be motivated to combine the systems taught in Suzuki and Chang because each patent describes different system that are based on differing technologies (Amendment, Page 7), the examiner notes that Chang is merely relied upon for the well known concept of assigning higher priority to real-time data (*such as voice*) during a network congestion condition and not for packet-network technologies that may or may not be compatible with the network discussed in Suzuki. Furthermore, both references are from a field of analogous art in network congestion alleviation and Chang provides motivation for combining the references (*see above*). Thus, the examiner notes that one of ordinary skill in the art would be motivated to combine the teachings of Suzuki and Chang.

In response to the applicant's comments regarding claim 9, see the above response to arguments directed towards claims 1 and 4.

The dependent claims are argued as further limiting rejected independent claims
(*Amendment, Page 7*), and thus, also remain rejected.

Priority

3. Acknowledgment is made of applicant's claim for priority based on an application filed
on 5/21/1999.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
such that the subject matter as a whole would have been obvious at the time the invention was made to a person
having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the
manner in which the invention was made.

5. **Claims 1-9** are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki et al
(*U.S. Patent: 5,493,610*) in view of Chang et al (*U.S. Patent: 5,367,523*).

With respect to **Claims 1, 4, and 9**, Suzuki discloses:

A transceiver means being operable with variable transfer rates (*means for controlling a
data transmission rate, Col. 4, Lines 41-62*);

A detecting means for detecting the load upon a network circuit (*means for determining a
load status of a transmission circuit, Col. 6, Lines 1-12; and Col. 10, Lines 61-65*);

A control means for adjusting the transfer rate of the transceiver means in response to the detected load (*means for designating a transmission rate of a data signal, Col. 6, Lines 1-12; and Col. 10, Lines 61-65*);

Characterized in that:

The transceiver means comprises a modem for modulating and demodulating of non-speech data (*modem for use with facsimile-related data, Col. 4, Lines 41-62; Col. 6, Lines 35-35; and Fig. 1, Element 5*) and a codec for encoding and decoding of speech data (*speech encoder/decoder Col. 4, Lines 41-62; and Fig. 1 Elements 7 and 13*).

Suzuki does not teach adjusting a transmission rate according to a priority, wherein a speech codec has a higher priority than the facsimile modem. Chang, however, discloses a means for altering a transmission rate according to a network congestion status (*Col. 2, Lines 53-64; and Col. 8, Lines 3-24*), wherein real-time voice signals receive a higher priority than non-real-time data signals (fax) that receive a lower transmission rate under a congestion condition due to discarded packets (*Col. 6, Lines 21-48*).

Suzuki and Chang are analogous art because they are from a similar field of endeavor in congestion-based transmission rate adaptation. Thus, it would have been obvious to a person of ordinary skill in the art, at the time of invention, to modify the teachings of Suzuki the with transmission rate adaptation means taught by Chang to provide a means for guaranteeing the transmission of high priority voice data in order to meet a desired service level and achieve optimum data transmission performance (*Chang, Col. 6, Lines 50-60*).

With respect to **Claims 2 and 5**, Suzuki discloses:

The transceiver means comprises a plurality of predetermined transfer rates and the control means is adapted to select one of the predetermined transfer rates in response to the detected load (*multiple transmission rates, Col. 6, Lines 55-67; and transmission rate designation, Col. 6, Lines 1-12*).

With respect to **Claims 3, and 6-8**, Chang recites:

Sending a test packet to a predetermined destination over the network, receiving the test packet back from the predetermined destination and analyzing the occurring delay in order to determine the load on the network (*determining network congestion based on a round trip delay of a rate feedback request sample packet, Col. 7, Lines 46-56; and Col. 10, Lines 29-38*).

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Hansson et al (*"Phone Doubler – A Step Towards Integrated Internet and Telephone Communities," 1997*)- discloses a system that assigns higher priority to voice packets in a VoIP network during a congestion period.

Witowsky (*"IP Telephone Design and Implementation Issues," 1998*)- Discloses a VoIP system having a speech codec and data modem that assigns greater priority to real-time speech and video data.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James S. Wozniak whose telephone number is (571) 272-7632. The examiner can normally be reached on M-Th, 7:30-5:00, F, 7:30-4, Off Alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached at (571) 272-7843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

James S. Wozniak
10/4/2006



DAVID HUDSPETH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600